



#### **Proposed Replacement Drawings**

In the Office Action, the drawings were objected to by the Draftsperson for reference characters not being clear and legible, and for having text which did not meet the minimum height requirements.

Proposed replacement Figs. are included on the Proposed Replacement Drawing sheets attached with this Amendment and Response. No new matter has been added in these proposed replacement Figs. Several of the Figs. as originally submitted have been marked with references to new Figs. which show a closer view of the originally submitted material. These new Figs. show the earlier drawings clearly and legibly, with text that is in compliance with minimum character height guidelines.



Inventor: Combelles et al.
Docket No.: 9320.92USWO
Title: Multicarrier Modulation Using Weighted Prototype Functions
Serial No.: 09/446,958
PROPOSED Replacement Drawing

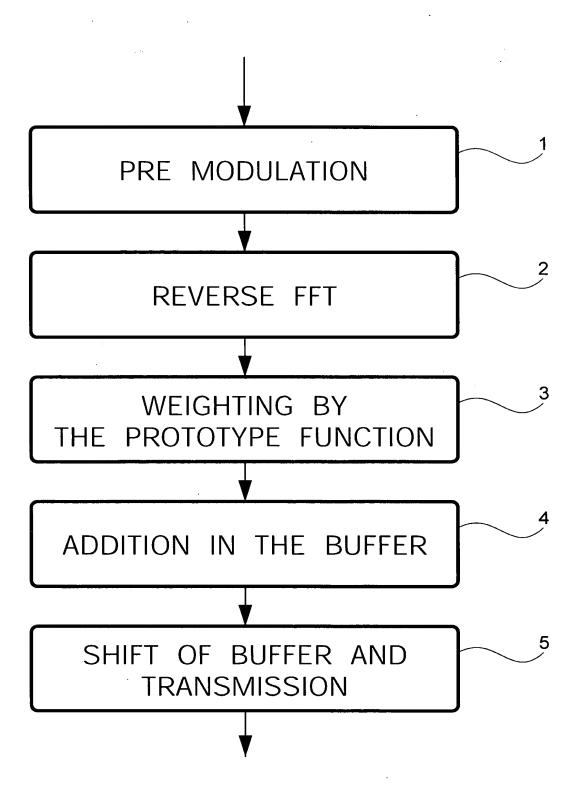


Fig. 1



Inventor: Combelles et al. Docket No.: 9320.92USWO

Title: Multicarrier Modulation Using Weighted Prototype Functions

Serial No.: 09/446,958 PROPOSED Replacement Drawing



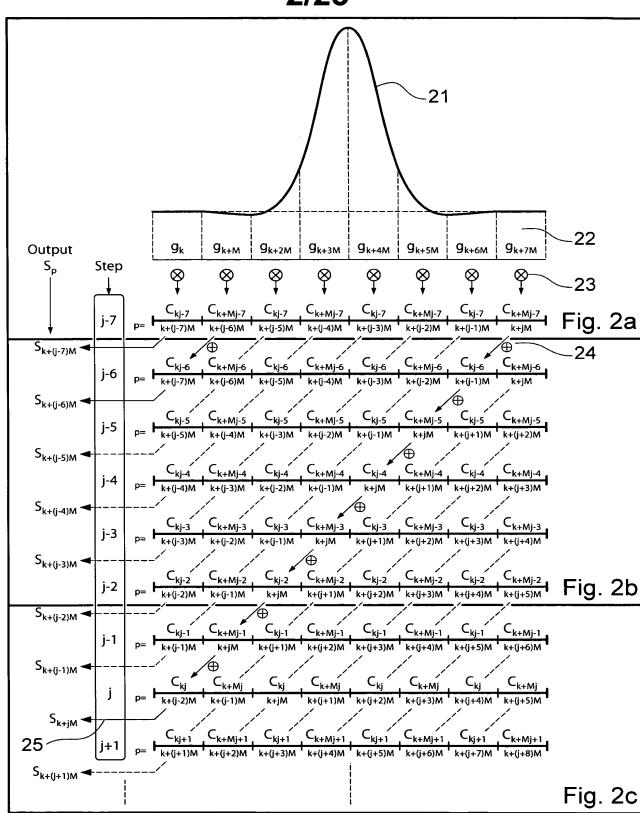
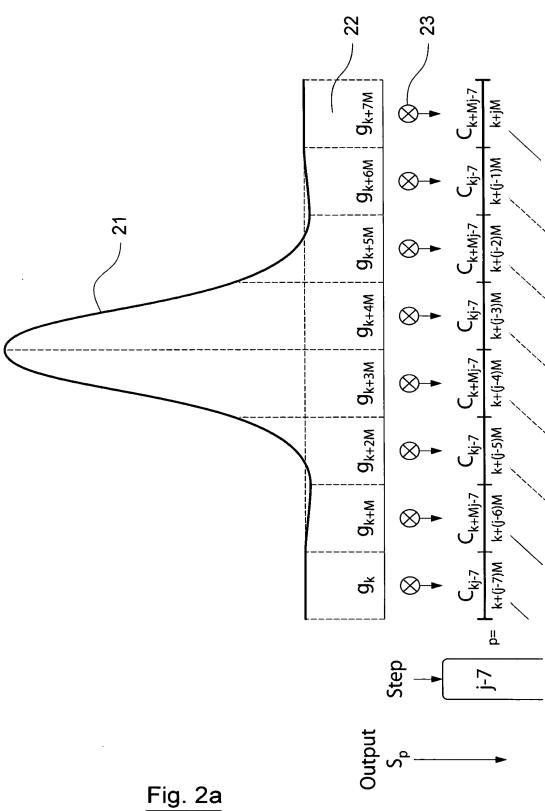


Fig. 2



Inventor: Combelles et al.
Docket No.: 9320.92USWO
Title: Multicarrier Modulation Using Weighted Prototype Functions Serial No.: 09/446,958
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Docket No.: 9320.92USWO
Title: Multicarrier Modulation Using Weighted Prototype P
Serial No.: 09/446,958

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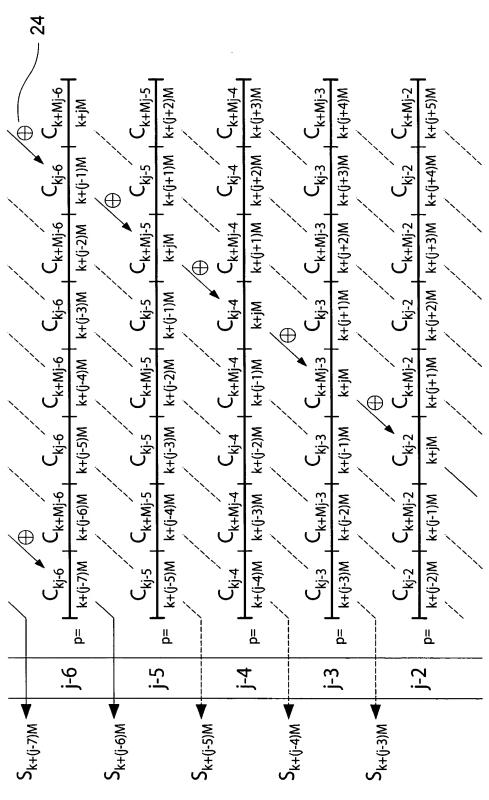


Fig. 2b



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haventor: Combelles et al. Jket No.: 9320.92USWO rtle: Multicarrier Modulation Using Weighted Prototype Function Serial No.: 09/446,958

PROPOSED Replacement Drawing

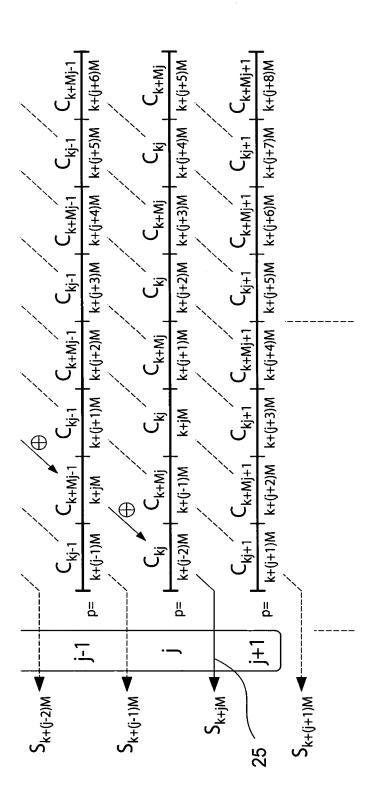


Fig. 2c



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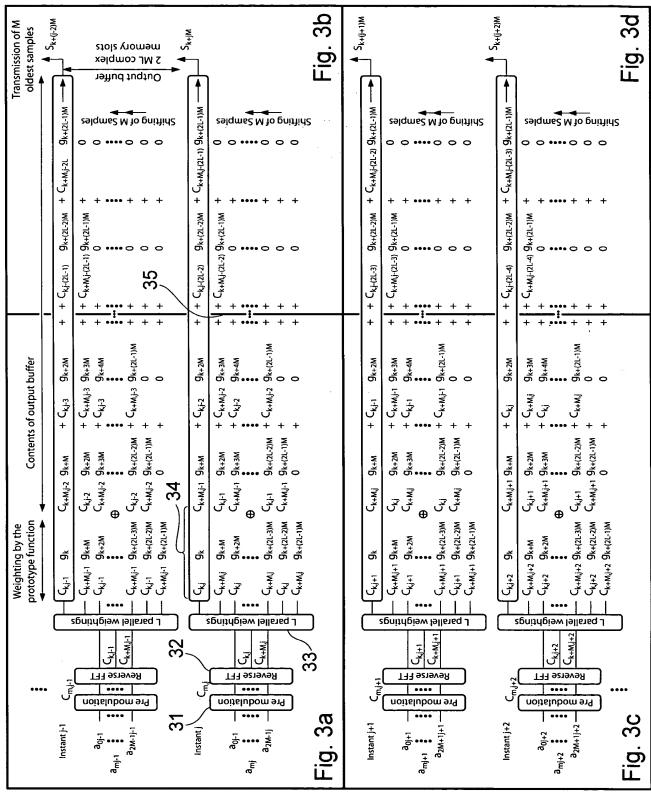


Fig. 3

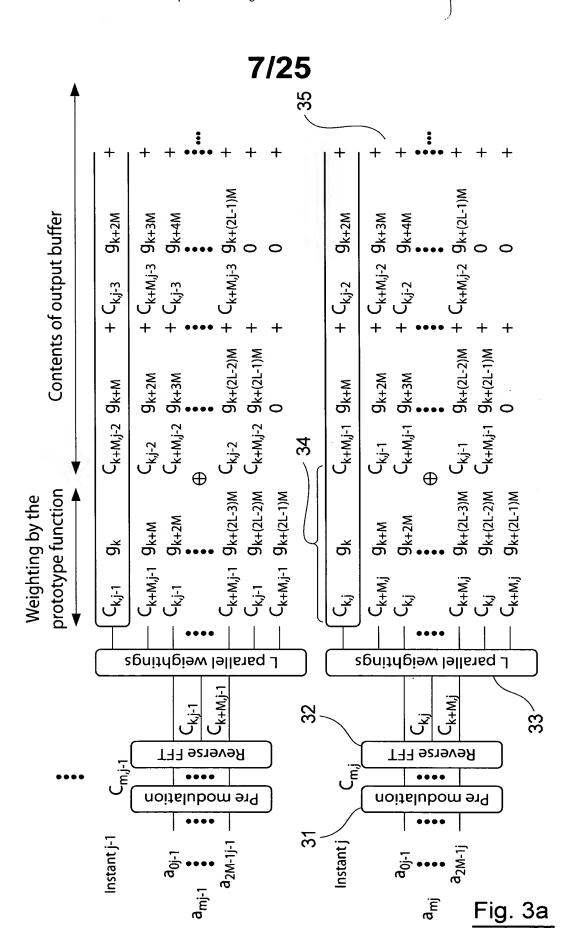


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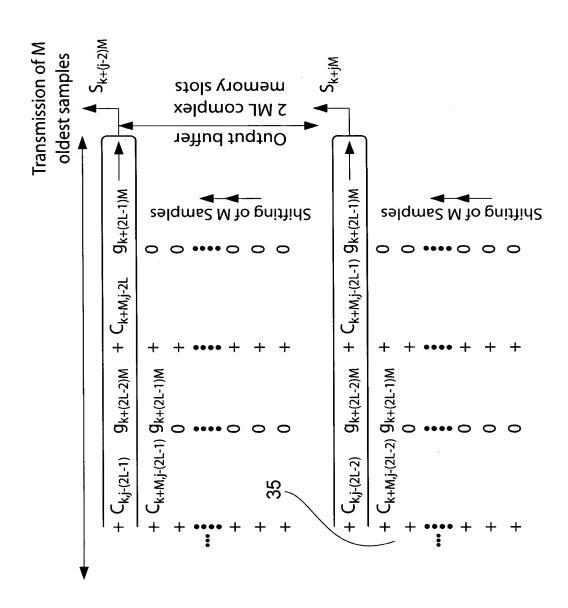
Serial No.: 09/446,958







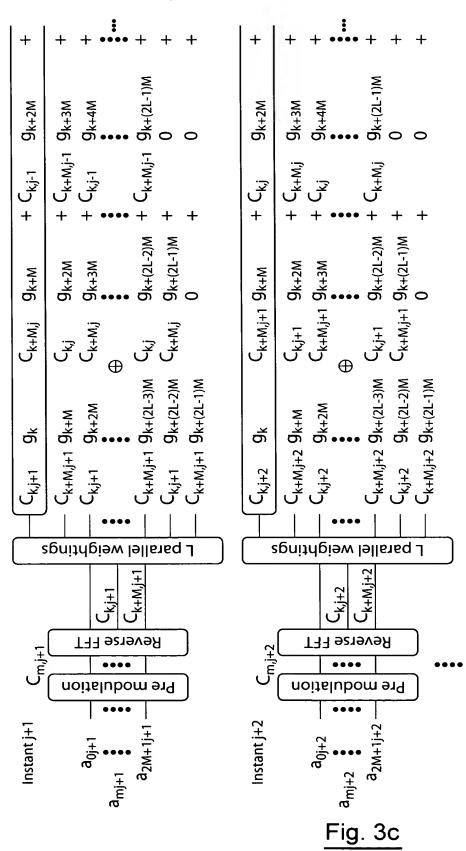
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Docket No.: 9320.92USWO
Title: Multicarrier Modulation Using Weighted Prototype Functions of the Prototype Function of th





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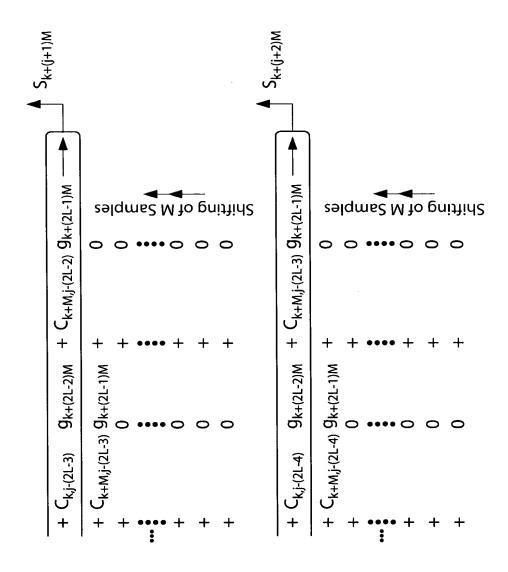


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Title: Multicarrier Modulation Using Weighted Prototype

Serial No.: 09/446,958 PROPOSED Replacement Drawing

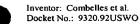




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Title: Multicarrier Modulation Using Weighted Prototype Fu

Serial No.: 09/446,958

PROPOSED Replacement Drawing

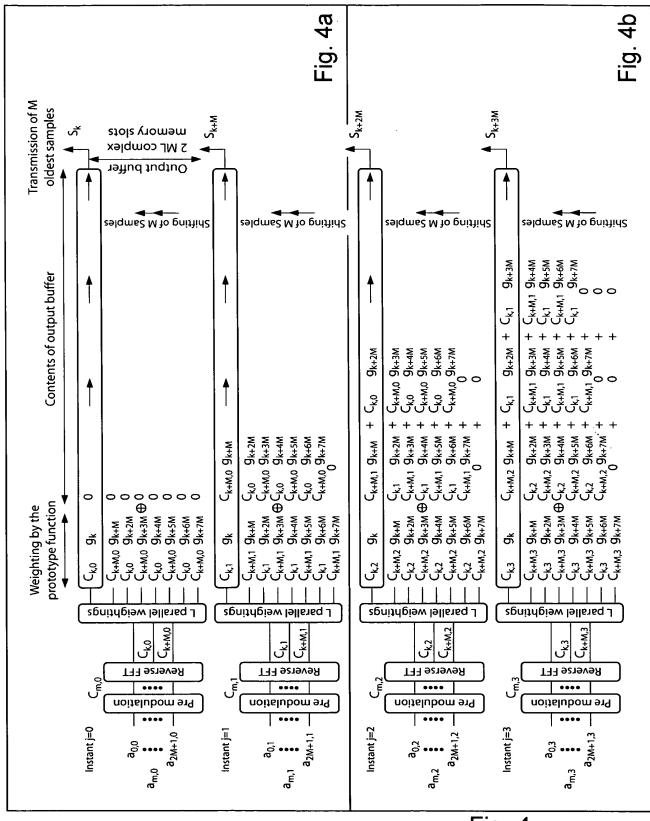


Fig. 4



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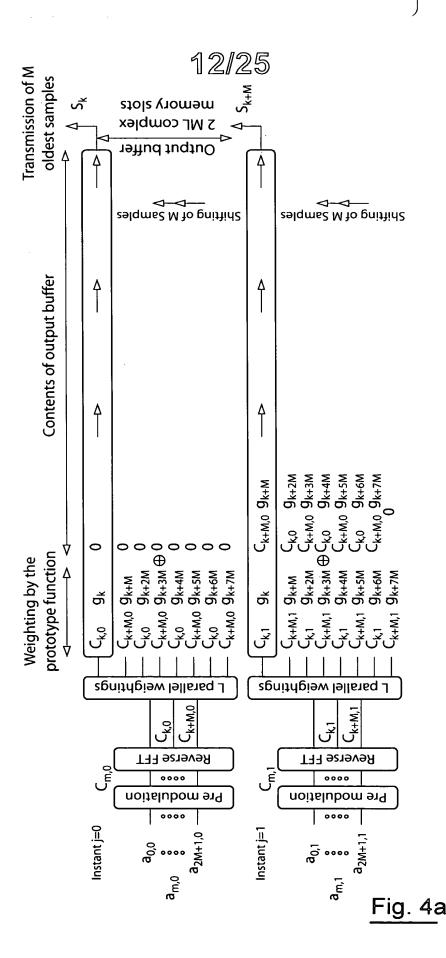
Inventor: Combelles et al.

Docket No.: 9320.92USWO

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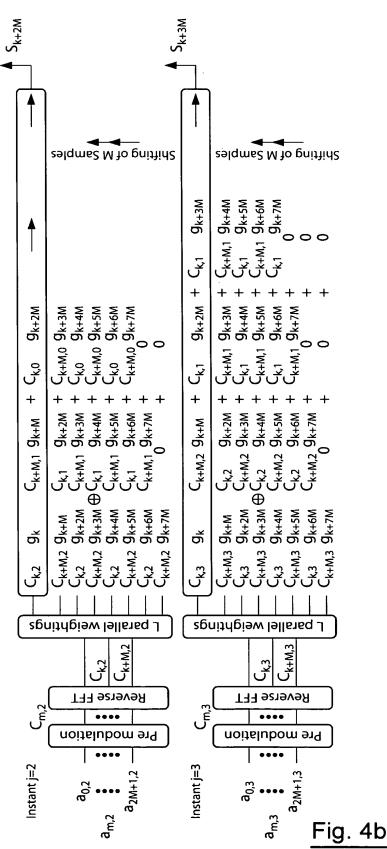
Serial No.: 09/446,958

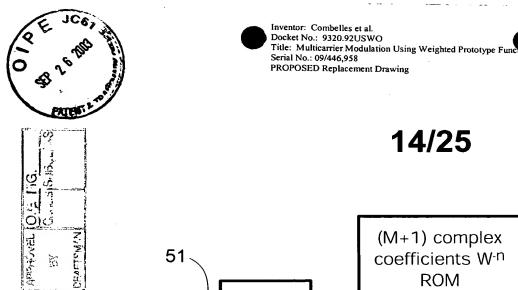


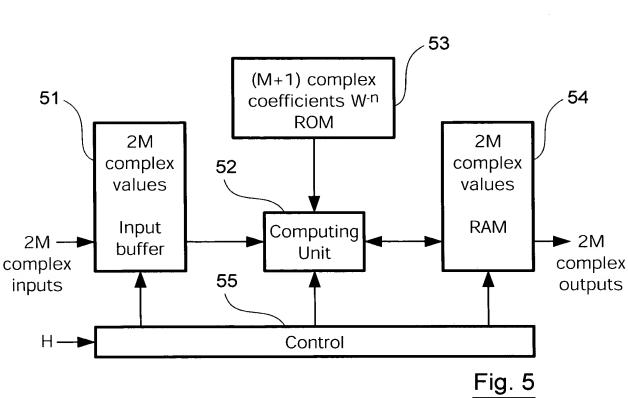


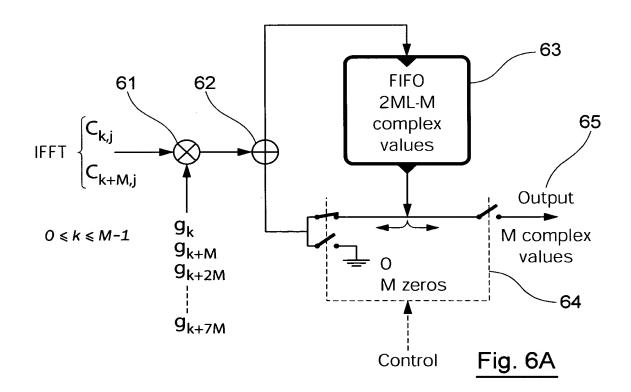
Inventor: Combelles et al.
Docket No.: 9320.92USWO
Title: Multicarrier Modulation Using Weighted Prototype Fur
Serial No.: 09/446,958

PROPOSED Replacement Drawing







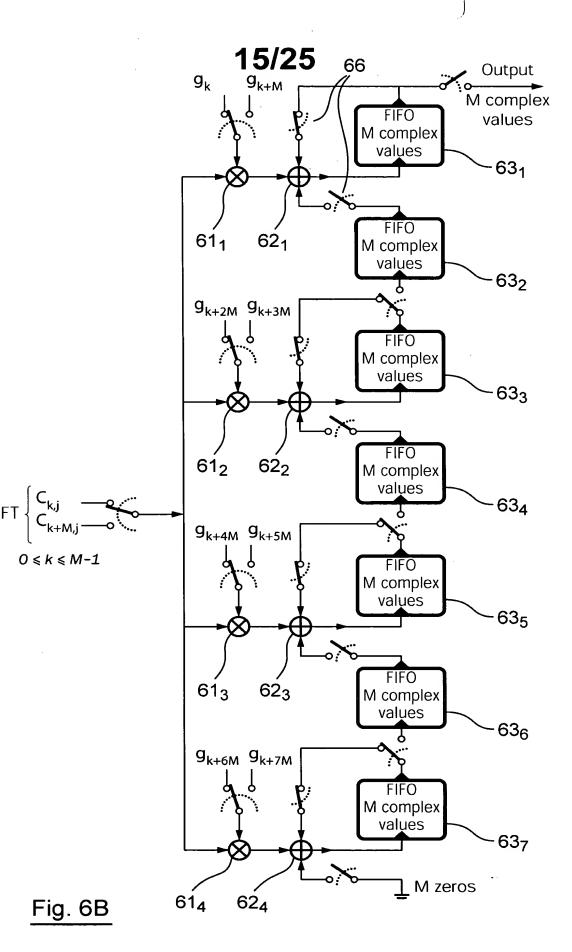




APPRIME OF FIG.

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Title: Multicarrier Modulation Using Weighted Prototype I Serial No.: 09/446,958 PROPOSED Replacement Drawing





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Title: Multicarrier Modulation Using Weighted Prototype Serial No.: 09/446,958 PROPOSED Replacement Drawing

Fig. 6C

61<sub>8</sub>

16/25 62<sub>1</sub> 61<sub>1</sub> -Output M complex  $\boldsymbol{g}_{k+M}$ values **FIFO** M complex values 63<sub>1</sub>  $g_{k+2M}$ FIFO M complex values  $\mathbf{g}_{\mathsf{k+3M}}$ FIFO M complex values  $\boldsymbol{g}_{k+4M}$ FIFO M complex values  $0 \le k \le M-1$  $g_{k+5M}$ **FIFO** M complex values  $\boldsymbol{g}_{k+6M}$ FIFO M complex values -62<sub>7</sub>  $g_{k+7M}$ FIFO M complex values

637



Inventor: Combelles et al.
Docket No.: 9320.92USWO
Title: Multicarrier Modulation Using Weighted Prototype North No.: 09/446,958
PROPOSED Replacement Drawing



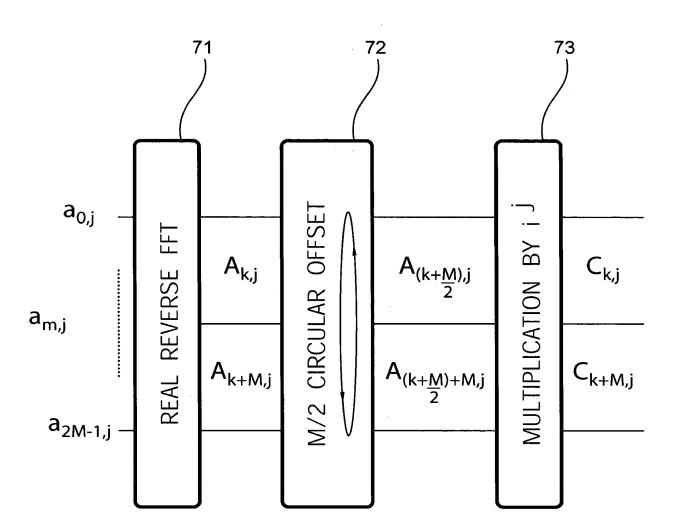


Fig. 7



Inventor: Combelles et al. Docket No.: 9320.92USWO

Title: Multicarrier Modulation Using Weighted Prototype

Serial No.: 09/446,958

FFT operation

samples

on 2M complex

Extraction of the

real part

PROPOSED Replacement Drawing



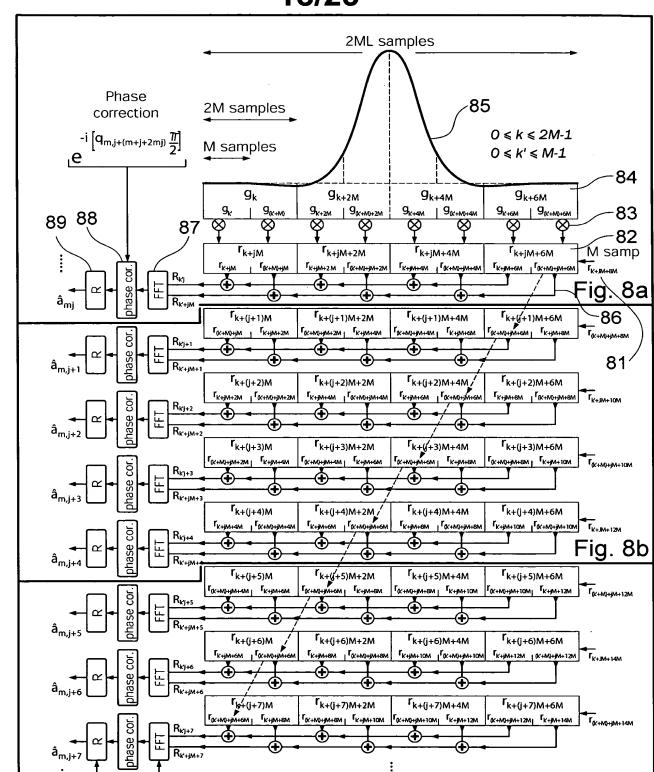


Fig. 8

Fig. 8c





Inventor: Combelles et al.
Docket No.: 9320.92USWO
Title: Multicarrier Modulation Using Weighted Prototype Fur Serial No.: 09/446,958 PROPOSED Replacement Drawing

19/25 8 M samp -82 83 -86 84 K+jM+6M | (K+M)+jM+6M 9(K+M)+6M  $0 \le k \le 2M-1$  $0 \le k' \le M-1$  $^{\mathsf{L}_{\mathsf{K+}}}$   $^{\mathsf{M+6M}}$  $g_{k+6M}$ g<sub>k+6M</sub> 85 K+jM+4M | (K+M)+jM+4M 9<sub>(K+M)+4M</sub> rk+jM+4M  $g_{k+4M}$ 2ML samples g K+4M K+jM+2M (K+M)+jM+2M 9(K+M)+2M  $r_{k+jM+2M}$ 9k+2M9<sub>K+2M</sub> (K+M)+jM g RHM 2M samples M samples  $r_{k+jM}$ മ് **Γ** κ+iΝ മ്  $I_{\mathbf{K}^{+}\mathbf{j}\mathbf{M}}$ 87 جج  $-i\left[q_{m,j+(m+j+2m)j}\frac{\pi}{2}\right]$ correction Phase byase cor.

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Fig. 8a

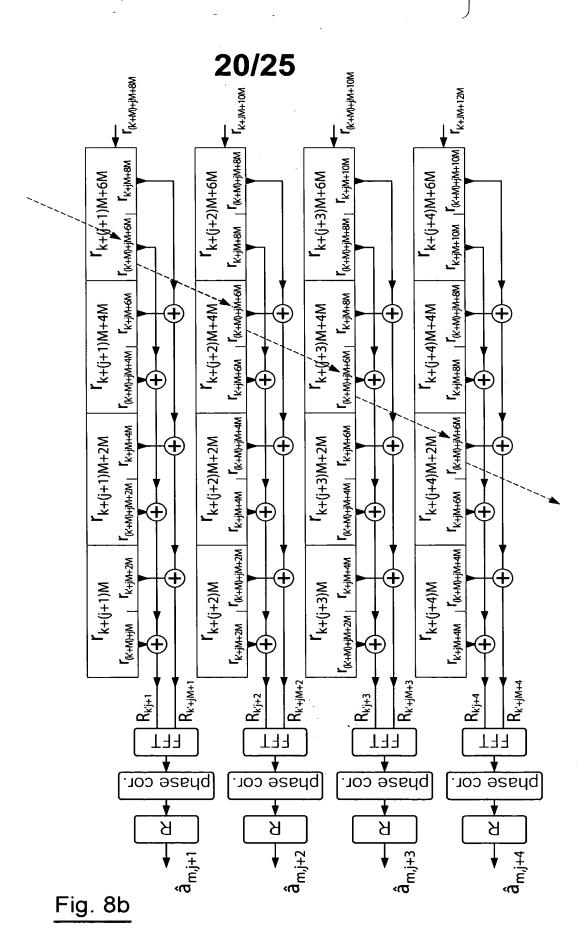


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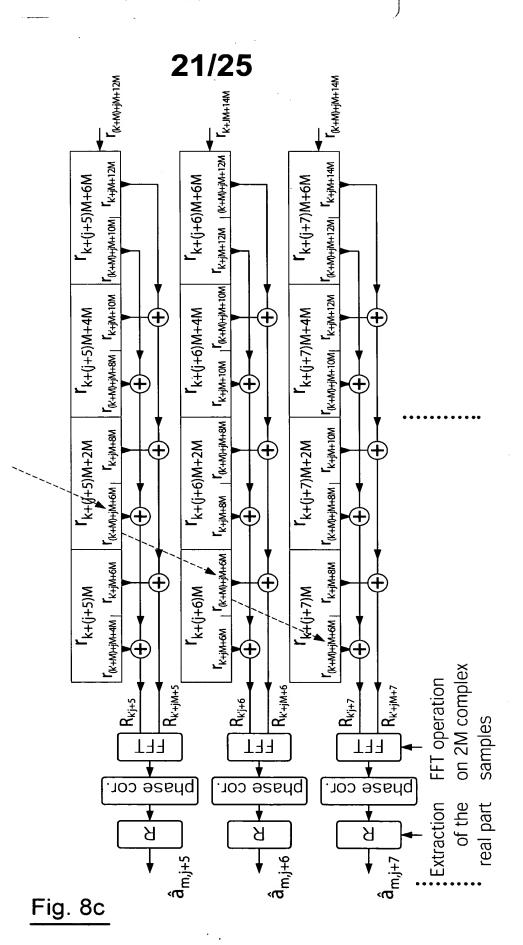
Title: Multicarrier Modulation Using Weighted Pro Functions

Serial No.: 09/446,958 PROPOSED Replacement Drawing





Inventor: Combelles et al.
Docket No.: 9320.92USWO
Title: Multicarrier Modulation Using Weighted Prototype Ful
Serial No.: 09/446,958



Inventor: Combelles et al. Docket No.: 9320.92USWO Title: Multicarrier Modulation Using Weighted Prototype Function Serial No.: 09/446,958 PROPOSED Replacement Drawing 22/25 M samples (K+M)+jM+(4L-2)M(K+M)+jM+2LM K+jM+(4L-4mM | (K+M)+jM+(4L-4)M | K+JM+(4L-2)LM | (K+M)+jM+2(L-1)M | K+JM+2LM C. LUS BLL Anstored O.S. Fig. 9k+6M 9k+MH6M K+jM+(4L-2)M  $^{I}$  k+(j+2L-2)M+2(L-1)M K+jM+2LM <sup>I</sup> k**¥**(j+1)M+2(L-1)M  $^{\Gamma}k+(j+1)M+2(L-1)M$ ' k+jM+2(L-1)M DESTING! Š  $0 \le k \le 2M-1$  $0 \leqslant k' \leqslant M-1$ (K+M)+jM+2(L-1)M | [K+jM+2(L-1)M  $g_{k+6M}$ 2ML samples 9<sub>k+2M</sub> 9<sub>(k+M)+2M</sub> (K+M)+jM+2LM (K+M)+jM+2M K+jM+4M <sup>r</sup>k+(j+2L-1)M+2M r+(j+1)M+2M  $r_{k+jM+2M}$ 'k+jM+2M (K+M)+jM+2M K+jM+2M K+jM+2LM g k+≥k K+jM+(2L-2)M (K+M)+jM+(2L-2)M (K+M)+jM K+iN+2M g (K+M) ⊗•  $^{1}$  k+(j+2L-2)M  $\mathbf{r}_{\mathsf{k}+(\mathsf{j}+\mathsf{2L}-\mathsf{1})\mathsf{M}}$ <sup>[</sup>k+(j+1)M 2M samples r +jM တိ M samples (K+M)+jM+(ZL-2)M (K+M)+jM Q<sub>4</sub>⊗• FFT operation on 2M complex samples RK+jM+2L-2 | Rk'+jM+2L-1  $R_{k'+jM+1}$ RKj+2L-جج جج  $-i\left[q_{m,j+(m+j+2mj)}\frac{\pi}{2}\right]$ correction Phase bysse bysse cou əseyd COL bysse COL COL Extraction of the real part 2 R R 2 **â**mj+2L-2 l âmj+2L-1 <sup>(</sup> â<sub>mj+1</sub> â <sub>Tj</sub>

Fig. 9



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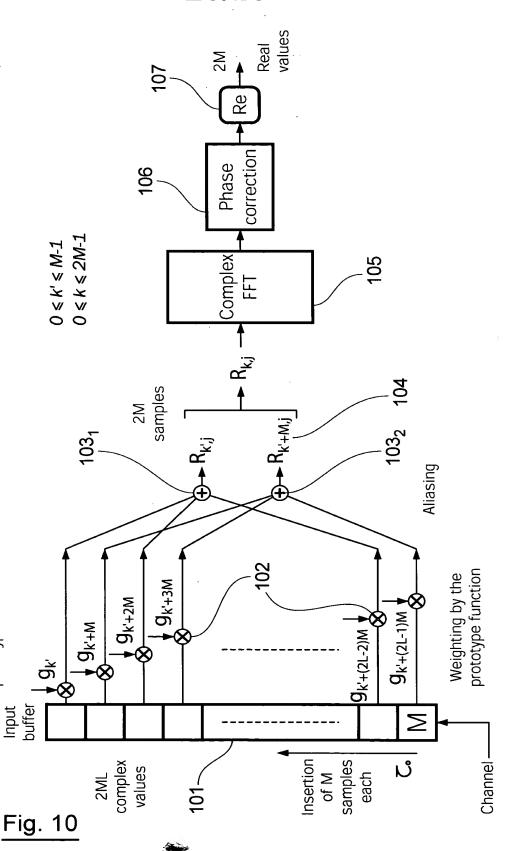
> Coefficients of the prototype function

Inventor: Combelles et al. Docket No.: 9320.92USWO

Title: Multicarrier Modulation Using Weighted Prototype Fund Serial No.: 09/446,958

PROPOSED Replacement Drawing

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Title: Multicarrier Modulation Using Weighted Prototype Fusion

Serial No.: 09/446,958



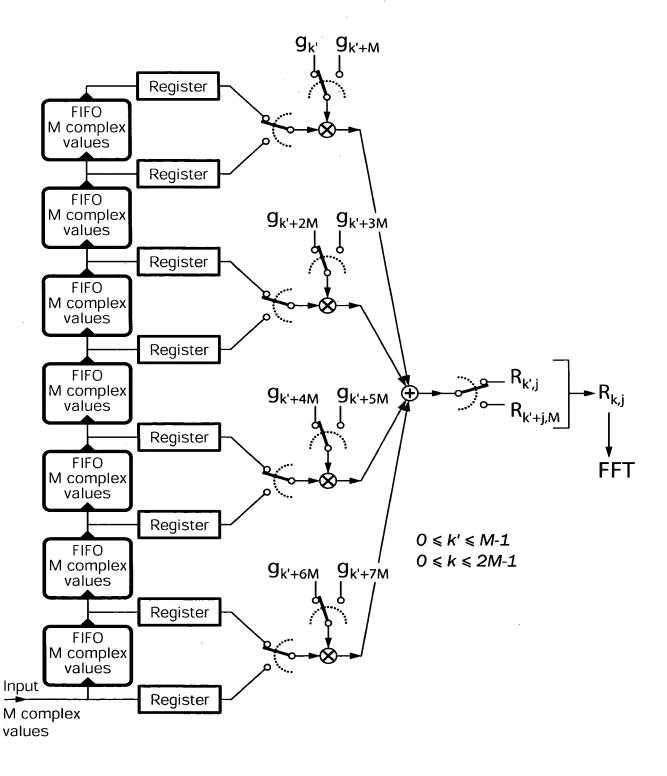


Fig. 11



Inventor: Combelles et al. Docket No.: 9320.92USWO

Title: Multicarrier Modulation Using Weighted Proto-

Serial No.: 09/446,958



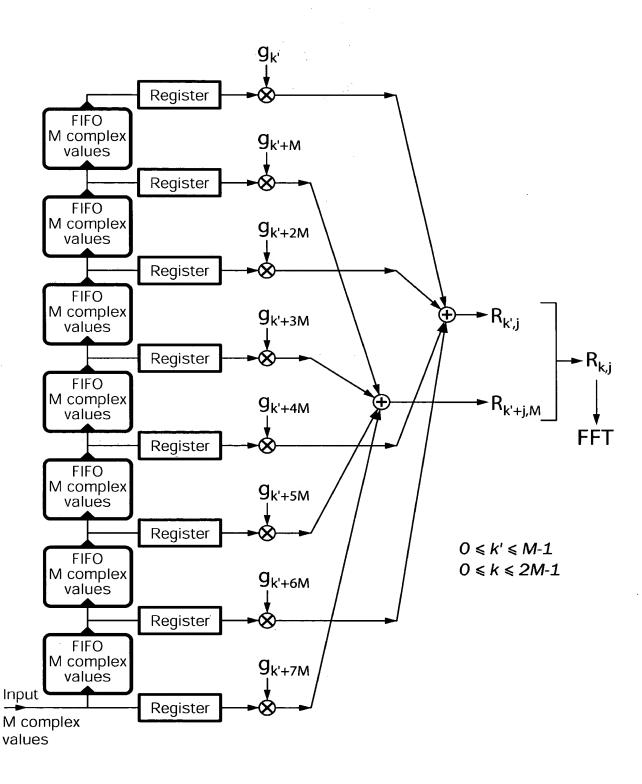


Fig. 12